

Secondary Science newsletter- Central North region

Information and professional learning for leaders and teachers of science in secondary schools in the central North Island Newsletter 1 | Term 1 | March 2012

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Kia ora koutou, Talofa lava, and a warm welcome to Waikato, Bay of Plenty, King Country, central plateau, Hawkes Bay, Gisborne and Coromandel secondary Science leaders and teachers.

I am delighted to be the central North Island secondary science facilitator and I am working with Team Solutions- University of Auckland. I live at Mount Maunganui and will be based in Tauranga. For the first time I will be working with schools in the Hawkes Bay region - so it will be a pleasure to meet and work with teachers from this very beautiful area. Physics is my specialist subject and I have been directing the PLUTO project in past years.

As you may have heard Team Solutions of The University of Auckland is the new PLD provider for NCEA support in the Northern and Central North regions.

This PLD offered to secondary schools has a different nature to what it has been in the past. The Secondary Student Achievement Contract will focus on both improving middle leader capability and raising achievement for all students and particularly for Māori and Pasifika students and those with special learning needs. Key focus areas for this PLD will be on supporting schools with the NCEA standards alignment process and with learning area literacy and language needs, in the context of The New Zealand Curriculum.

My work as the secondary science facilitator for the central North region has changed and will be:

- Intensive in-school Professional learning- based on needs analysis and inquiry, focussed on accelerating student achievement. In-depth schools will be identified by the Ministry of Education regional offices.
- Facilitation of cluster workshops for leaders of science and teachers in charge of specialist senior science subjects. These may cover NCEA and/or other issues.
- Some focussed cluster sessions followed by needs analysis with a selected school for in-school PLD with an outcome that can be evaluated.

Unfortunately, I will not be available for one-off requests to help as in the past. And all the work I do has to have some measurable impact on leadership capability or student achievement.

Important dates Term 2

HOD science (middle leaders) NCEA regional cluster workshops- no charge to schools.

- **Napier –Hawkes bay region**
Tues 1 May 1-4pm at Eastern Institute of Technology
- **Gisborne –Poverty Bay and East cape Thurs 3 May 1-4pm at the Poverty Bay Club**
- **Tauranga –BOP region Thurs 17 May 1-4pm at Mount Maunganui Surf club**
- **Taupo –Volcanic region Thurs 31 May 1-4pm at Tauhara College seminar room. TBC.**
- **Hamilton Waikato Jumbo day Fri 15th June-Venue to be confirmed**

Facilitator: Simon Taylor

These middle leader cluster workshop have targeted objectives: Raising student achievement at Level 2 NCEA internal Achievement standards-Carrying out practical investigations and researching contemporary issues in all the four senior sciences. The focus will be on the science literacy, specific language needs and nature of science strands of the internal tasks at level 2.

NZQA Moderation best practice workshops 2012- No charge to schools but bring lunch

Biology 22 May Tauranga
Biology 22 May Whakatane
Science 25 August Rotorua
All sciences 15 June Hamilton
Biology 4 August Napier
Chemistry 30 June Napier
Physics 15 September Napier
Science 13 July Napier
For registration go to:
<http://www.nzqa.govt.nz>

Comvita Science video Challenge

Grand prize \$5000, for year 9 and 10 students. The challenge opens on the 1st July, submissions close 31 August and prizegiving is on the 6th September. This is a fantastic opportunity for your science students at years 9-10 to actively use the Nature of Science strand! It's creative, collaborative and it's all about engaging our young ones to further explore relevant science contexts. Go for it!

For more details go to:

www.comvitasciencechallenge.co.nz

Earth and Space scholarship

Scholarship for Earth and Space is being discussed. Jenny Pollock is keen for us to make a comment about whether this should have scholarship status. I believe it should, in just the same way as Physics, Biology and Chemistry has scholarship status. I will attach the document with this newsletter.

Conferences

Shifting Thinking conference NZCER in Wellington 3-4th May

www.nzcer.org.nz cost \$440

Scicon 2012 in Auckland 1-4th July

www.scicon2012.org.nz cost \$425 for NZASE members

7th International conference on Science and Technology Education
4-7th November at Sultan Qaboos University, Oman. Cost \$400 US

<http://smec.curtin.edu.au/index2.cfm>

Reading

"The Big Picture" Dennis Littky, an easy read in understanding how we can change school cultures in the 21st century.

"Catching the knowledge Wave?" Jane Gilbert, simply a fabulous book that unwraps the ideas of the knowledge society and next steps for secondary education.

"The Tao of Physics" Fritjof Capra, essential modern Physics understanding, particularly needed in our senior physics classes! I still believe our physics y12-13 courses need contemporary thought. Life is not just about mechanics in the 18th century!

"Conceptual Physics" Paul Hewitt, most likely the most influential physics text, I have ever used, it has changed the way I have taught physics. Great for physics scholarship kids.

"A really short History of Nearly everything" Bill Bryson-The illustrated version! Publisher Random House. This is just a wonderful book to have in class- essential reading for years 1-90. The full version book has some rich information about human evolution and an appropriate reading age for our year 13 Bio students.

Our science wiki

This is our very own science website for the central North island, there are some fabulous resources and current 2012 NCEA material. Please use it and download what ever you want.

- Raising Māori and Pasifika achievement
- Literacy documents
- All the senior science NCEA current matrices and standards
- Learning environment research

<http://bop-waikato-gisborne-science-teachers.wikispaces.com>